[redacted]

**Potter, Dolly**

**From:** Joseph Scire [jss@src.com]
**'ent:** Monday, August 09, 1999 5:14 PM
**o:** Dan Olson
**Subject:** Re: Boundary Conditions

Dan,

We propose the following tasks associated with dealing with the boundary conditions.
You will note that we are proposing to make a change to CALPUFF to handle the same
type of boundary condition file as the CALGRID model. It was felt that this method is preferable to the treatment in the test runs (although that method is feasibile) because (a) it eliminates a step in converting boundary concentrations
into equivalent effective source characteristics, and (b) it uses a more inituitive input (i.e., concentration) than the previous method. The coding required for this change is minimal.

Scope of Work
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The subtasks proposed are:

a) Contact outside sources (email & telephone) for relevent information. Conduct in-house literature review of relevent journals and reports.
b) Organize and sythesize data into a consistent set of information by species. This task may require a box model run to obtain photochemically balanced concentrations.
c) Develop spatial and diurnal profiles of BCs.
d) Develop software to prepare BC files for input into the model (BCON.DAT file).
e) Add option to CALPUFF to read BC concentration file. Prepare documentation of new option.
f) Conduct an annual CALPUFF simulation for recommended BCs. Postprocess the results (summing into modeled sources), and prepare summaries with and without BC values.

Cost
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The estimated labor for (a)-(d) is 60 hours. The CALPUFF code modifications (Task e) are estimate at 16 hours. The labor costs for Task (f) is estimated at 24 hours. The total cost for the boundary condition tasks is estimated at $9,400.

Schedule
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The request for information from outside sources could require a considerable amount of time for responses. Rather than delay the remaining tasks, a two-week
period for data collection (Task a) is suggested. At the end of that time, work
on the remaining tasks will proceed with available data. A total of 3 weeks is estimated to complete Tasks (b)-(f). Therefore, the total schedule for the BC 'asks is estimated at 5 weeks.

Please let me know if you have any questions, or need further information.

Joe

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